App. No. 10/615675
Office Action Dated September 15, 2004
Amd. Dated March 15, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Claims 1, 4, 9, 12 and 15-17 are amended.

Listing of Claims:

1. (Amended) Light source device for illuminating microdisplay devices~~, e.g. a DMD, LCOS, LCD, GLV, etc, wherein it comprises~~ comprising:

- a housing having a specularly and/or diffusely light reflective interior surface and an exit aperture ~~adapted to the shape and size of the microdisplay device~~, wherein the housing defines a cavity, wherein,

- ~~at least one~~ two or more light emitting devices are mounted on or in wall(s) of the housing which do not directly face the exit aperture, for emitting light into the cavity,

- the exit aperture is adapted to the shape and size of the microdispay device selected from the group consisting of DMD, LCOS, LCD and GLV, and

- the light source device further comprises electrical power supply unit(s) and control electronic unit(s) for controlling the light emitting device(s).

2. (Previously Presented) Device according to claim 1, wherein it comprises at least two light emitting devices with separate power supply units.

3. (Previously Presented) Device according to claim 1, wherein it comprises at least two light emitting devices supplied with electricity from a single power supply.

4. (Currently Amended) Device according to claim [[1]] 2, wherein the at least two light emitting devices are adapted for emitting light with different wavelengths.

5. (Previously Presented) Device according to claim 4, wherein the control unit is adapted to control on and off switching of the light emitting in sequences.

6. (Previously Presented) Device according to claim 4, wherein the control unit is adapted to adjust the wavelength and brightness/intensity of the light emitted from the exit aperture by individual control of the light emitting devices or groups of light emitting devices.

7. (Previously Presented) Device according to claim 5, wherein the light emitting devices are adapted to emit red (R), green (G) and blue (B) light, and that the control unit is adapted to switch said devices on and off to provide cycles of said colours to the microdisplay device.

8. (Previously Presented) Device according to claim 1, wherein it comprises optical components inside the cavity.

9. (Currently Amended)Device according to claim 1, wherein it comprises a lens in the light path~~, preferably inside the cavity~~.

10. (Previously Presented) Device according to claim 1, wherein it comprises a transparent window or lens for closing the aperture in order to provide a closed, contamination free cavity.

11. (Previously Presented) Device according to claim 1, wherein it also comprises a light sensor.

12. (Currently Amended) Device according to claim [[10]] 11, wherein the light sensor is connected to a control electronic unit to adjust the optical characteristics of the light sources.

13. (Previously Presented) Device according to claim 1, wherein the housing is made of a material with good thermal conductivity properties.

14. (Previously Presented) Device according to claim 1, wherein it comprises a cooling system.

15. (Currently Amended) Device according to claim [[13]] 14, wherein the cooling system is completely or partly embedded in the housing.

16. (Currently Amended) Device according to claim [[1]] 15, wherein it comprises a temperature sensor.

17. (Currently Amended) Device according to claim [[15]] 16, wherein the temperature sensor and/or the cooling system is connected to the control electronic unit.

18. (Previously Presented) Device according to claim 1, wherein it comprises imaging and/or integrating optics in the light path outside the housing, from exit aperture to micro display.